

Translation

PATENT COOPERATION TREATY

PCT/JP2003/003669



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference P02-0031PCT | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/JP2003/003669 | International filing date (day/month/year) 26 March 2003 (26.03.2003) | Priority date (day/month/year) 28 March 2002 (28.03.2002) |
| International Patent Classification (IPC) or national classification and IPC C08G 73/00, C08F 299/00 // C07C 231/02, 233/40, B82B 1/00, 3/00 | | |
| Applicant COMMUNICATIONS RESEARCH LABORATORY, INDEPENDENT ADMINISTRATIVE INSTITUTION | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 14 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☒ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

| | |
|--|--|
| Date of submission of the demand 28 October 2003 (28.10.2003) | Date of completion of this report 03 February 2004 (03.02.2004) |
| Name and mailing address of the IPEA/JP | Authorized officer |
| Facsimile No. | Telephone No. |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-4, 12-26, 28, as originally filed
 pages 27, filed with the demand
 pages 5-11, filed with the letter of 23 January 2004 (23.01.2004)
- ☒ the claims:
 pages 1-4, 6-10, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 5, 11-36, filed with the letter of 23 January 2004 (23.01.2004)
- ☒ the drawings:
 pages 1-8, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☒ the claims, Nos. 37
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
- ☒ not complied with for the following reasons:

See supplemental sheet

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☒ all parts.
- ☐ the parts relating to claims Nos. _____

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PCT/JP 03/03669**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV. 3.

Nanoparticles having a shell structure (claims 2-13, 23-29 and 34, and claims 1, 16-22 and 30-33 in as much as they refer to nanoparticles) and nanowires having a continuous structure (claims 14, 15, 35 and 36, and claims 1, 16-22 and 30-33 in as much as they refer to nanowires) are not considered to include the same special technical feature, and do not constitute a group of inventions so linked as to form a single general inventive concept. Therefore, these are different inventions and the number of inventions is two.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|----------|-----|
| Novelty (N) | Claims | 1-34, 36 | YES |
| | Claims | 35 | NO |
| Inventive step (IS) | Claims | 1-34, 36 | YES |
| | Claims | 35 | NO |
| Industrial applicability (IA) | Claims | 1-36 | YES |
| | Claims | | NO |

2. Citations and explanations

Document 1: JP 2000-063513 A (Toyo Ink Manufacturing Co., Ltd.), 29 February 2000

Document 2: EP 899286 A1 (Toyo Ink Manufacturing Co., Ltd.), 3 March 1999

The invention set forth in claim 35 is not novel over document 1.

Document 1 discloses a polyamine type dendromer which has unsaturated bonds, and indicates that this dendromer can be hardened by exposure to active energy radiation. It also mentions that a known photopolymer sensitizer can be added (paragraph [0049]).

The invention set forth in claim 35 is not novel over document 2.

Document 2 discloses a polyamine type dendromer which has unsaturated bonds, and indicates that this dendromer can be hardened by exposure to active energy radiation. It also mentions that a known photopolymer sensitizer can be added (paragraph [0100]).

The inventions set forth in claims 1-34 and 36 are not disclosed in any of the documents cited in the international search report, and are novel and involve an

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inventive step. Specifically, no document discloses a
"molecular device".